

ABSTRACT

The present invention provides a resin composition containing ultrafine particles exhibiting excellent properties absent from conventional materials. The
5 resin composition is produced by uniformly dispersing, in a resin, metal or semiconductor ultrafine particles with the surfaces modified with a polymer. Specifically, a polymer having a mercapto group at one end is produced by radical polymerization of an unsaturated monomer in
10 the presence of a specified thiocarbonylthio group-containing compound and then treating the resultant polymer with a treating agent, and the surfaces of the ultrafine particles are modified with the polymer having a mercapto group at one end to prepare the polymer-
15 modified ultrafine particles. The polymer-modified ultrafine particles are mixed with a resin to achieve the resin composition containing the ultrafine particles uniformly dispersed in the resin.